

# HPI Kolloquium

## 24.09.2015, 16:00 Uhr

Hasso-Plattner-Institut, Vorlesungsgebäude, Auditorium 1  
Campus Griebnitzsee, 14482 Potsdam

### “An Introduction to Multivariate Algorithmics”

Prof. Michael Fellows

Charles Darwin University, Australia

#### **Abstract**

The talk will focus on concrete practical motivations, examples and perspectives that have driven and continue even more forcefully to drive the development of the parameterized / multivariate theory of algorithms and complexity. The objective is not to describe the details of the theory, but rather to concretely motivate it. The talk is aimed at practical computer scientists who have often been rightly skeptical that algorithms and complexity theory has anything much to offer. The advent of multivariate algorithmics opens up many new ways in which a mathematically disciplined theory of algorithms and complexity can be deployed to strengthen practical computing.

#### **Short CV**

Prof. Fellows received his PhD from UCSD in 1985 and has since taught in the USA, Canada, New Zealand and Australia. In 2006 he received the prestigious Humboldt Research Prize for foundational work on parameterized complexity. He is an Associate Editor for the ACM Transactions on Algorithms and the Journal of Computer and System Sciences. Elected one of the ten Inaugural Fellows of the EATCS in 2014, and an Honorary Fellow of the Royal Society of New Zealand (one of 230 since 1870; the first computer scientist on that list). He has published three books and about 200 scientific articles. Google Scholar lists more than 12000 citations for papers co-authored by him.

#### **Hosts**

Prof. Dr. Tobias Friedrich